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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,634	06/04/2002	Larry Rushefsky	IO-1013US	8725
24923	7590	09/08/2004	EXAMINER	
PAUL S MADAN MADAN, MOSSMAN & SRIRAM, PC 2603 AUGUSTA, SUITE 700 HOUSTON, TX 77057-1130			BELLAMY, TAMIKO D	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/936,634	Applicant(s) RUSHEFSKY ET AL.	
	Examiner Tamiko D. Bellamy	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-15, 17, 19-23, 26-30, 34-36, 44 and 45 is/are rejected.
- 7) ☒ Claim(s) 16, 18, 24, 25, 31-33, 37 and 39-43 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment dated 6/7/04 has been received and entered. Claims 1-8 are canceled. Claims 9-45 are currently pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 9-15, 17, 19, 20, 22, 26-28, 30, 34-36, 44, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsumoto et al. (6,305,223).

Re to claims 9, 12, 36, 38, 44 Matsumoto et al. discloses in figs. 13 and 14, a housing (e.g., ceramic cover 1501), a sensor module (e.g., acceleration detection element 1502), and a control unit (see col. 8, lines 10-11). As depicted in fig. 14, Matsumoto et al. discloses a plurality of sensor modules (e.g., acceleration detection elements 1601-1603) coupled to a substrate (1604) having slots for receiving the sensor modules (1601-1603). As shown each sensor module has an axis positioned in a different spatial direction (see col. 9, lines 6-13).

Re to claim 10, as depicted in fig. 13, Matsumoto et al. discloses a micro-machined accelerometer (e.g., acceleration detection element 1502).

Re to claim 11, as depicted in fig. 14, Matsumoto et al. discloses three micro-machined accelerometers (1601-1603) positioned such that the axes are orthogonal to each other.

Re to claims 13 and 14, as depicted in figs. 13 and 14, Matsumoto et al. discloses the sensor module (e.g., acceleration detection elements 1502/1601) in a package consisting of a hollow frame.

Re to claim 15, as depicted in fig. 14, Matsumoto et al. discloses a housing (e.g., ceramic cover 1501) with a cavity, one or more parallel planar surfaces, and a bottom surface of a cavity.

Re to claims 17, 26, 27, as depicted in fig. 5, Matsumoto et al. discloses a resilient coupling (e.g., solder 815) for coupling the sensor to the package.

Re to claims 19, 20, and 22, as depicted in fig. 13, Matsumoto et al. discloses the housing cavity includes resilient coupling (1505) coupled to the bottom surface of the cavity, and positioned at one or more ends of the bottom surface of the cavity.

Re to claim 28, as depicted in figs. 5 and 13, Matsumoto et al. discloses a passive and active region including bond pads (e.g. electrical contact 804).

Re to claim 30, as depicted in fig. 13, Matsumoto et al. discloses wire bonds electrically coupling the sensor to the housing.

Re to claim 45, as depicted in fig. 14, Matsumoto et al. discloses the sensor packages (e.g. acceleration detection elements 1601-1603) are coupled to each other via substrate (1604).

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 21, 23, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (6,305,223).

Re to claims 21, 23, 29 as depicted in fig. 13, Matsumoto et al. discloses the housing cavity includes resilient coupling (1505) coupled to the bottom surface of the cavity, and positioned at one or more ends of the bottom surface of the cavity. Matsumoto et al. do not specifically disclose the resilient couplings positioned at the approximate center of the bottom surface of the cavity of the housing. However, the placement of an element is a design consideration clearly in the preview of one having ordinary skill in the art. Therefore, to employ Matsumoto et al. on a resilient couplings positioned at the approximate center of the bottom surface on would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches its use on a acceleration sensor with a housing that makes use of a resilient coupling.

Allowable Subject Matter

6. Claims 16, 18, 24, 25, 31-33 are objected to as being dependent upon a rejected base claim 9, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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7. Claims 37, and 39-43 are objected to as being dependent upon a rejected base claim 36, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claim 9-45 have been considered but are moot in view of the new ground(s) of rejection. It is the Examiners position that 9-15, 17, 19-23, 26-30, 34-36, 44, and 45 are not patentable in view of the newly applied art of Matsumoto et al. (6,305,223).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko D. Bellamy whose telephone number is (571) 272-2190. The examiner can normally be reached on Monday - Friday 6:30 AM to 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Tamiko Bellamy

T.B.

September 3, 2004


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